




Fujitsu scanners & Hyland Software "Delivering Automation in the Lending Process"

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Imaging Products Group (IPG)

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Agenda






- Introductions of Fujitsu and Hyland Software, Inc.
  - Kevin Neal, Fujitsu presenter
  - Megan Fowler, Fujitsu moderator
  - Eric Walker, Hyland presenter
- Current events effecting the Lending market
- Home Mortgage Disclosure Act (HMDA) market
- Student Loan Provider case study
- Evolution of Business IT including SOA
- Loan Approval Processing efficiency example (SOA success story)
- PFU TimeStamp integration with OnBase 6.2
- Hyland corporate overview
- OnBase Lending Solution
  - Loan Processing
  - Underwriting
  - Post-Closing/Audit
- Loan Servicing
- Retrieval
- Questions and Answers

Current events effecting the Lending market






- **Subprime Lending** [1]
  - "Companies involved in the subprime mortgage market make loans to those with underwhelming credit histories. But the number of Americans now defaulting on their mortgages is climbing as home values sag and interest rates rise."
- **Proposed "Photo Identification Security Act"** [2]
  - "In order to open a bank account, the bill would require either a foreign or U.S. passport, a Citizenship and Immigration Services photo ID card, or a Social Security card in conjunction with a state or federal ID."
- **Patriot Act** [3]
  - Request for a report on integrating automated fingerprint identification for ports of entry into the United States.
  - Request for machine readable passports.
- **Sarbanes-Oxley** [4]
  - "… response to a number of major corporate and accounting scandals including those affecting Enron, Tyco International, Peregrine Systems and WorldCom…"
  - The financial reporting processes of most organizations are driven by IT systems.

"The nature and characteristics of a company's use of information technology in its information system affect the company's internal control over financial reporting."

Source: (1) http://www.forbes.com/markets/2007/02/13/subprime-update-lender-markets-equity-cx_jl_0213markets32.html
(2) http://www.bizjournals.com/orlando/stories/2007/03/05/daily39.html?from_rss=1
(3) http://en.wikipedia.org/wiki/Patriot_Act
(4) http://en.wikipedia.org/wiki/Sarbanes-Oxley_Act

Home Mortgage Disclosure Act (HMDA)






- Since 1975, the Home Mortgage Disclosure Act (HMDA) has required most mortgage lending institutions with offices in metropolitan areas to disclose to the public information about the geographic location and other characteristics of the home loans they originate or purchase during each calendar year. Disclosure of home-lending activity is intended to help the public determine whether institutions are adequately serving their communities' housing finance needs, to facilitate enforcement of the nation's fair lending laws, and to guide public- and private-sector investment activities.

1. Home loan and reporting activity of home lenders covered under HMDA, 1990-2005

Number

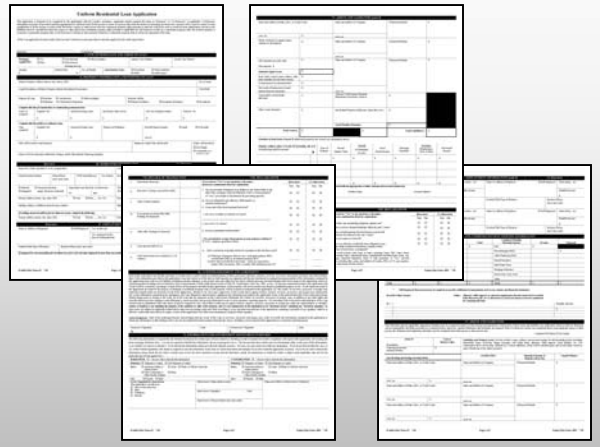
Year	Applications received for home loans on one- to four-family properties, and home loans purchased from other lenders (millions)						Reporters	Disclosure reports[2]
	Applications				Loans purchased	Total[1]		
	Home purchase	Refinance	Home improvement	Total[1]				
1990	3.27	1.07	1.16	5.51	1.15	6.66	9,332	24,041
1991	3.26	2.11	1.18	6.55	1.36	7.91	9,358	25,934
1992	3.54	5.24	1.23	10.01	1.98	12.00	9,073	28,782
1993	4.52	7.72	1.40	13.64	1.80	15.44	9,650	35,976
1994	5.20	3.80	1.69	10.69	1.48	12.17	9,858	38,750
1995	5.51	2.70	1.75	9.96	1.28	11.24	9,539	36,611
1996	6.33	4.54	2.14	13.01	1.82	14.83	9,328	42,946
1997	6.75	5.39	2.16	14.30	2.08	16.38	7,925	47,416
1998	7.96	11.42	2.04	21.43	3.23	24.65	7,836	57,294
1999	8.43	9.37	2.05	19.85	3.01	22.86	7,832	56,966
2000	8.28	6.54	1.99	16.81	2.40	19.21	7,713	52,776
2001	7.69	14.29	1.85	23.83	3.77	27.59	7,631	53,066
2002	7.40	17.48	1.53	26.41	4.83	31.24	7,771	56,506
2003	8.15	24.60	1.51	34.26	7.23	41.49	8,121	65,808
2004	9.79	16.10	2.20	28.13	5.14	33.27	8,853	72,246
2005	11.67	15.90	2.54	30.17	5.87	36.04	8,848	78,193

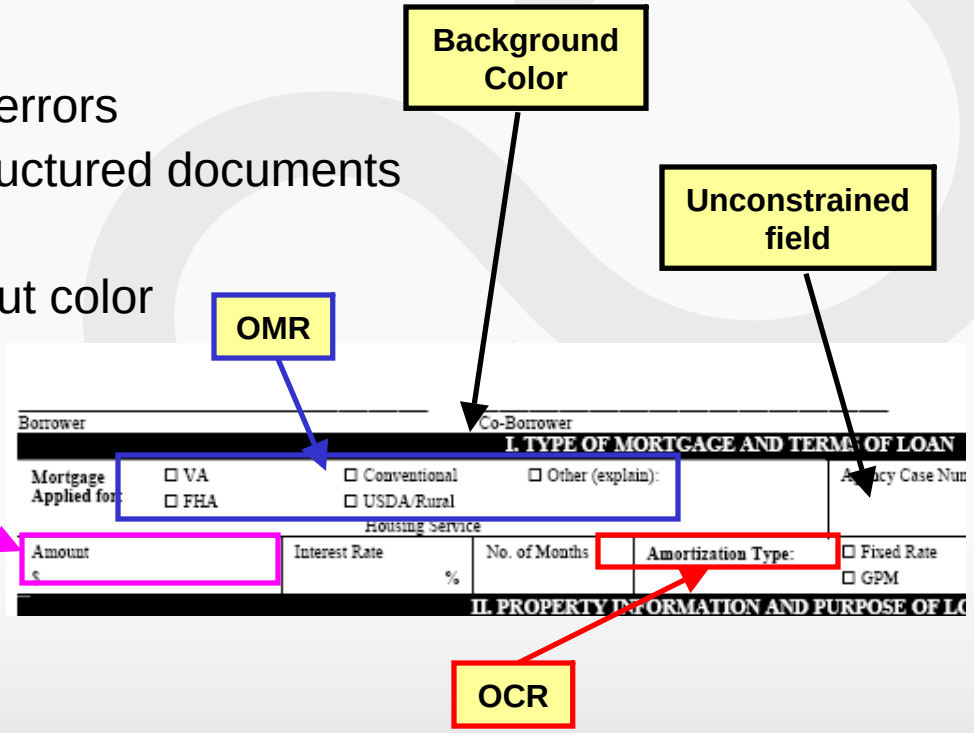
Source: http://www.federalreserve.gov/pubs/bulletin/2006/hmda/default.htm

Scanner specific considerations for Lending documents

- Hundreds of index fields
- Small font type
- Many unconstrained data errors
- Unstructured and semi-structured documents
- Various forms types
- Lack of background dropout color

Uniform Residential Loan Application example





Forms Processing Terminology:
OMR = Optical Mark Recognition (Check Box)
ICR = Intelligent Character Recognition (Handprint)
OCR = Optical Character Recognition (Machine Print)

FUJITSU THE POSSIBILITIES ARE INFINITE

Student Loan Provider case study (summary)






- Leading student loan provider with a $4 billion portfolio
- $1.5 billion in loans annually previously outsourced

- Fujitsu scanner/On Base scanner specific components
  - Fujitsu fi-5750C 57ppm/114ipm ADF and flatbed scanners
  - OnBase Disconnected Scanning
  - OnBase ECM (enterprise content management) from Hyland
  - OnBase Workflow

- Result
  - Met goal for processing 90%+ of 200-300 incoming applications daily
  - Less manual indexing via OnBase ECM
  - Enhanced Customer Service via e-mailing of images for discrepancies
  - Increased loans processed per persons daily from 5-10 to 30-40
  - Better supports compliance and regulatory considerations

Read more about this and other OnBase Lending Case Studies at:
http://www.hyland.com/English/IndustrySolutions/Lending/CaseStudies

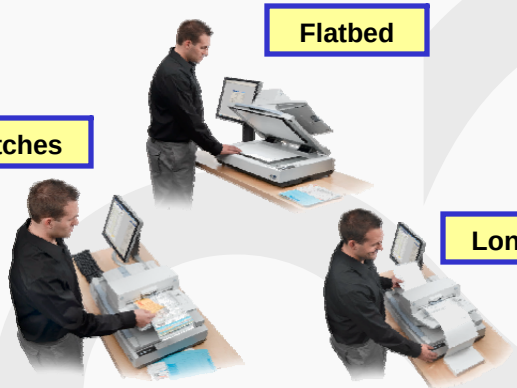
Student Loan Provider case study (interoperability)

Every morning, between 200 and 300 lengthy loan applications received

Mixed batches

Flatbed

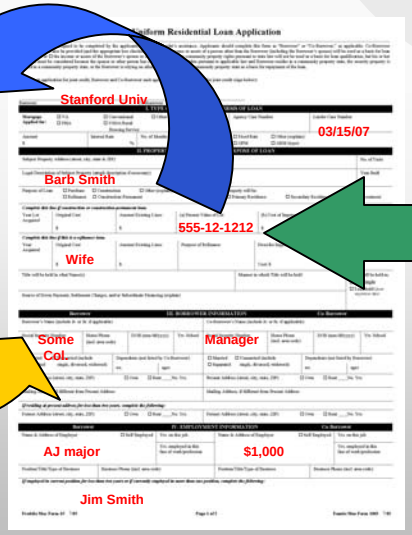
Long documents



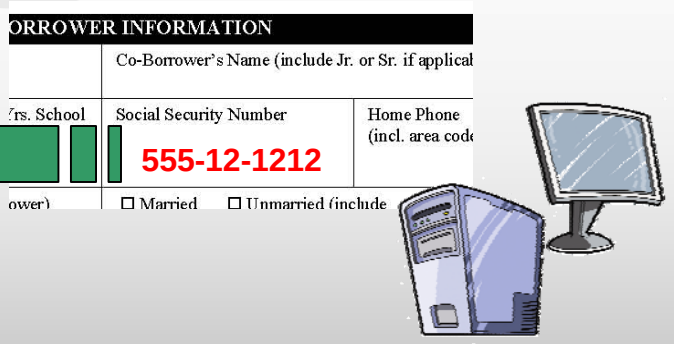
Mailroom operators using Fujitsu fi-5750C scanners

Query based on SSN

Line-of-business application database



OnBase fills other values automatically



Operator keys in Social Security Number (SSN)

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Evolution of Business IT connectivity

The ’80s

- Dark Ages, Pioneers of IT
- Technology limitations were not conducive to sharing information

- Most business with any sort of IT infrastructure included mainframe computer and “dumb” terminals

The ’90s

- Middle Ages, Foundations of IT
- A connected world emerges via file sharing, e-mail, chat and other forms of communication.

- Huge surge in demand for internet connections in general (AOL, MSN, PacBell, SW Bell, etc.)
- PC systems more affordable (Microsoft Windows, Linux, MacIntosh, etc.)

Early 20th century

- Revolution, True adoption of IT
- Real solutions created however still a bit complicated, expensive and closed architecture

- Stable broadband connectivity for centralized business and remote locations (T1, T3, DSL and Cable modems)

Now (2007)

- The Future, Innovative solutions
- A better way to do more of the same. Planning for the future

- Connecting Legacy systems with new technology. Reusing existing IT infrastructure assets

Service Oriented Architecture (SOA)






- A Service-oriented architecture (SOA) is a software architecture that uses loosely coupled software services to support the requirements of business processes and software users. Resources on a network in an SOA environment are made available as independent services that can be accessed without knowledge of their underlying platform implementation.

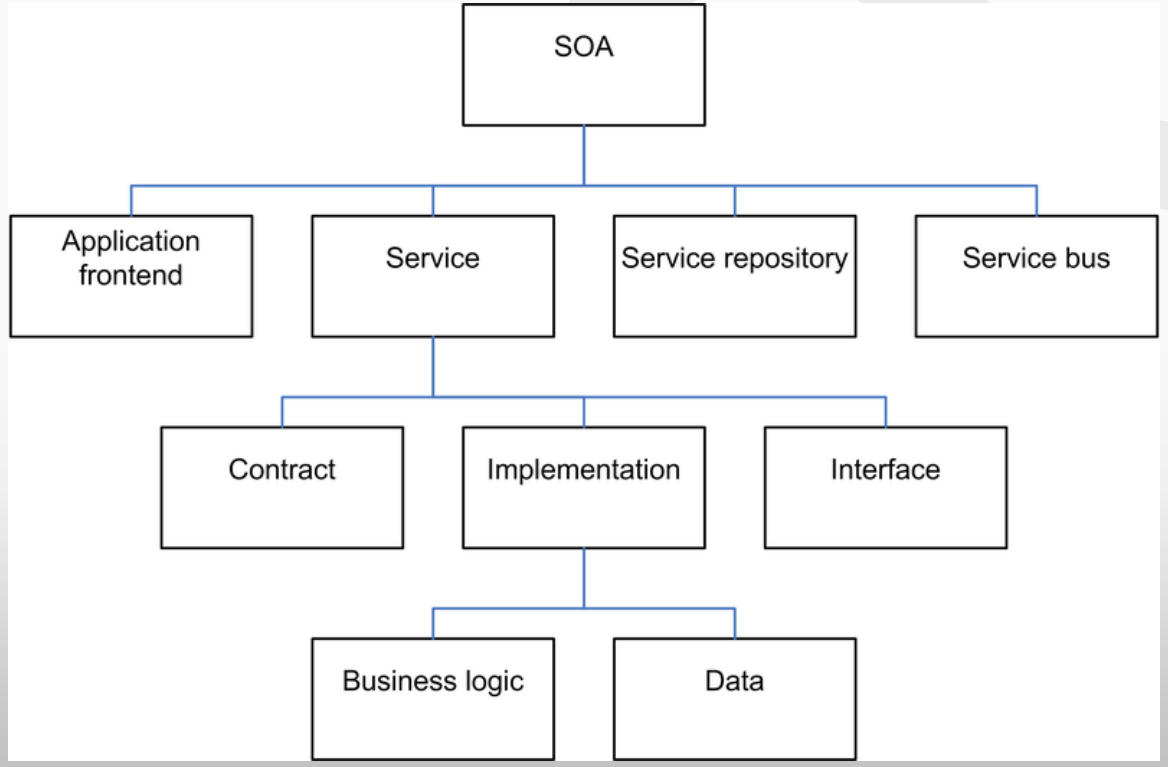
- Architecture is not tied to a specific technology. It may be implemented using a wide range of technologies, including REST, RPC, DCOM, CORBA or Web Services.

- An SOA example may be the Kofax “SOA” scanning front-end would more easily connect to a FileNet SOA system and could simultaneously connect to a Hyland SOA passing each system’s images based on the document type.

Source: (1) http://en.wikipedia.org/wiki/Service-oriented_architecture
(2) http://www.aiim.org/article-docrep.asp?ID=31481

The building blocks of SOA

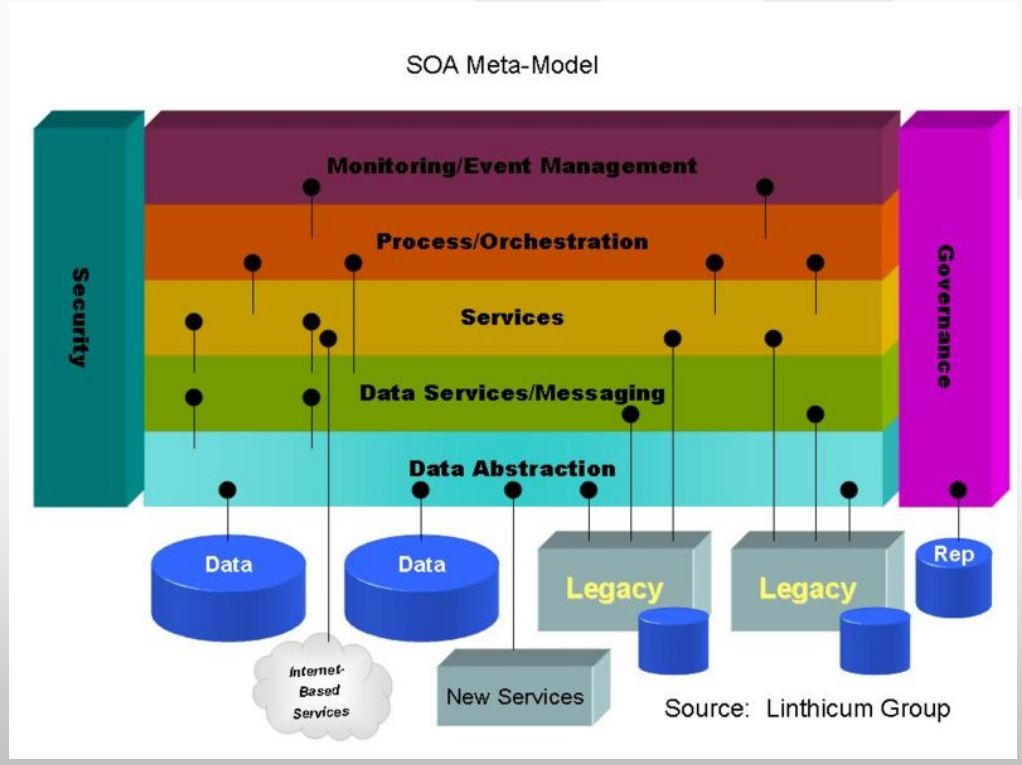
- SOA may be built on Web services standards (e.g., using SOAP) that have gained broad industry acceptance. These standards (also referred to as web service specifications) also provide greater interoperability and some protection from lock-in to proprietary vendor software.



Source: http://en.wikipedia.org/wiki/Service-oriented_architecture

SOA and Business Architecture

- One area where SOA has been gaining ground is in its power as a mechanism for defining business services and operating models and thus provide a structure for IT to deliver against the actual business requirements and adapt in a similar way to the business. The purpose of using SOA as a business mapping tool is to ensure that the services created properly represent the business view and are not just what technologists think the business services should be.



Source: http://en.wikipedia.org/wiki/Service-oriented_architecture

Major IT providers embracing SOA as the future






- Microsoft
  - "Learn how the Microsoft Service Oriented Architecture (SOA) vision and technology can help you realize a more agile and connected enterprise by using an IT infrastructure that can help streamline business processes, increase customer responsiveness, and improve interactions with key partners."
- Oracle
  - "Leading companies are tackling the complexity of their application and IT environments with Service-Oriented Architecture (SOA), which facilitates the development of modular business services that can be easily integrated and reused—creating a truly flexible, adaptable IT infrastructure. With an SOA approach, your IT organization will focus more resources and budget on innovation and on delivering new business services."
- IBM
  - "Within this area, SOMA (Service-Oriented Modelling and Architecture) was announced by IBM as the first SOA-related methodology in 2004"
- HP
  - "Companies can no longer afford to have disconnected technology and business processes that are not aligned to drive business performance, SOA is an ideal way to help customers effectively bring new products and services to market faster and increase IT governance while reducing IT complexity and costs of maintenance."

Source: http://www.microsoft.com/biztalk/solutions/soa/default.mspx,
http://www.oracle.com/technologies/soa/index.html
http://www.hp.com/hpinfo/newsroom/press/2005/050628c.html

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Loan Approval Processing efficiency






- Randolph-Brooks
  - Large credit union headquartered in Texas, 26 locations
  - 178,000 members and $2.5 billion in total assets
  - Fujitsu fi-5120C scanners, Kofax Document ScanServer & SOA example

BEFORE


Remote office representative


Customer


Corporate office


Loan specialist



Typical loan approval took 30 minutes up to 2 hours

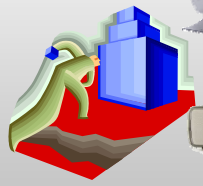
Results
Time consuming
Inefficient
Expensive
Error prone

Collect member ID cards, vehicle purchase orders, security agreements, etc

Loan specialist analyses data and processes the rest of the information

AFTER


fi-5120C


Customer


Kofax DSS

Video conference

Scanned information

Finalize


Loan specialist with video kiosk and scanner control


Loan specialist

Results
Improve service
Reduce costs
Consolidate IT
Future enhancements

SOA!

Source: http://www.integratedsolutionsmag.com/index.php?option=com_jambozine&layout=article&view=page&aid=5446

IT embracing SOA, not the acronym

THEY SAID IT: **IT pros may increasingly rely on technologies like SOA and virtualization, but they're wary of having buzz-phrases shoved down their throats.**

Appreciate the power of SOA, respect the challenges of IT

HTML

XML

SSL

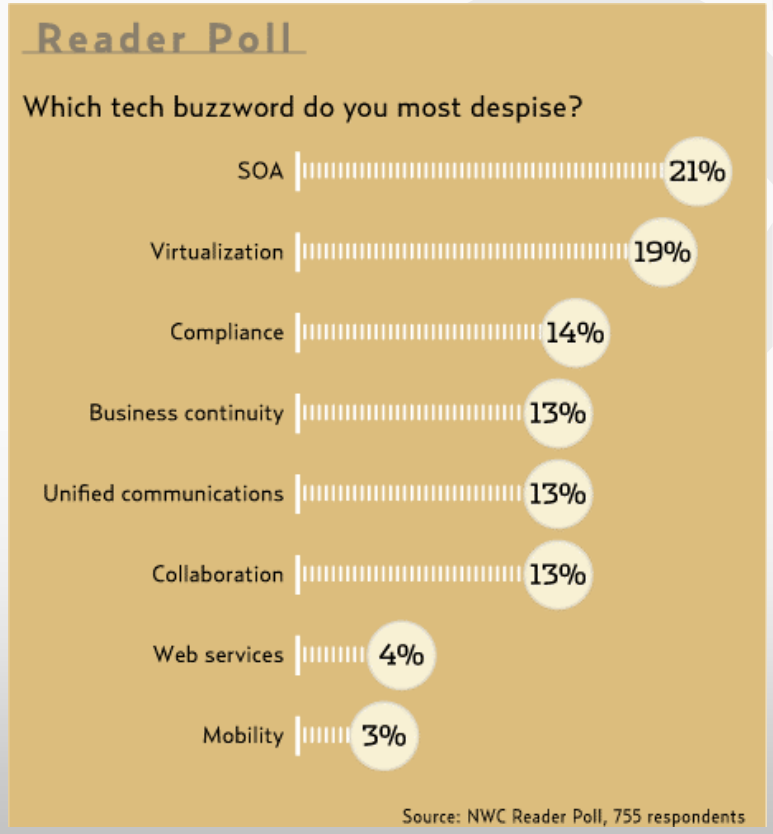
FTP

DSS

ICA

TCP/IP

CE



SOAP

DNS

VM

DHCP

Web Services

API

XPS

GUI

XPe

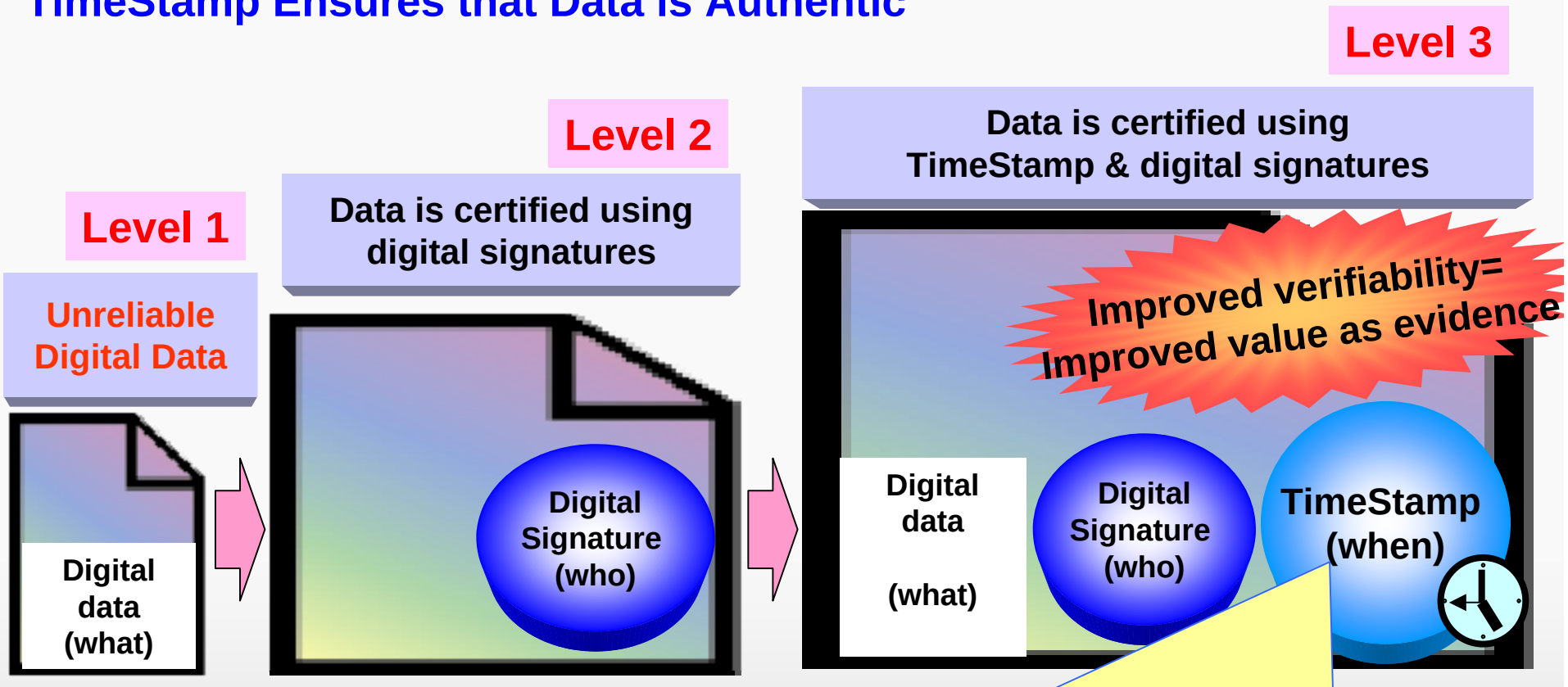
Source: http://www.networkcomputing.com/gallery/2006/1109/1109f1poll1.jhtml;jsessionid=OAQYELJ4RFYRGQSNDLPSKH0CJUNN2JVN

TimeStamp Technology in Onbase 6.2

- Add-on module for a digital signature
- Gives the user the ability to put a digital post-mark on a file to prove when the data was created
  - Validated by a third party data center
- Works with any electronic file

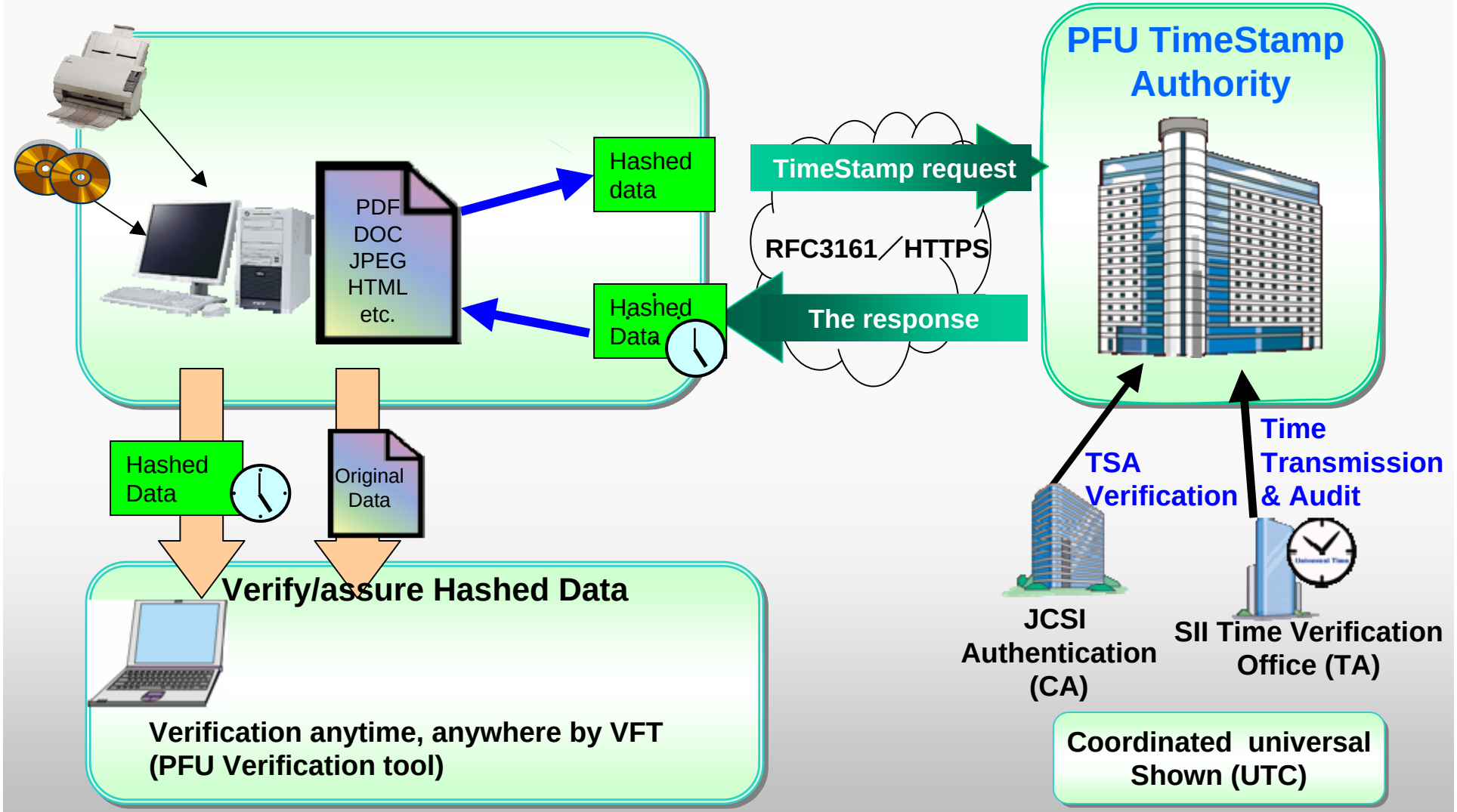
PFU TimeStamp Service

TimeStamp Ensures that Data is Authentic



- **Proof of existence**
  = proves when the digital data was generated
- **Proof of completeness**
  = proves that nobody has changed the contents of the digital data since the time indicated by the TimeStamp

PFU TimeStamp Service Structure



TimeStamp Technology in OnBase 6.2

- Proof of existence
  - Proves when the digital data was created
- Proof of completeness
  - Proves that no one has changed the contents of the digital data since the time indicated on the time-stamp
- Higher level of evidence compared to a digital signature by itself.

PFU TimeStamp Service

OnBase
a Hyland Software solution

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Fujitsu Scanner/OnBase Document Imaging

Document On-Ramp	Connect	Document Capture	Business Data
Distributed	ISIS	OnBase Document Imaging Module	Fujitsu PRIMEQUEST or third-party server
Moderate	TWAIN	or Other Forms Capture providers OCR for AnyDoc Cardiff TeleForm	COLD/ERM
Production	Kofax	EMC/Captiva Input Accel Kofax Ascent Capture	Images
		ReadSoft DOCUMENTS	Application documents

OnBase a Hyland Software solution

OnBase Clients

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Fujitsu fi-Series Scanner Line-up

Speed

100+ PPM

60 PPM

40 PPM

25 PPM

15 PPM

fi-5900C $24,995

fi-4860C $16,995
fi-4860C2 $17,995

fi-5750C $7,995
-VRS $8,995

fi-5650C $5,995
-VRS $6,995

fi-4340C $4,995

fi-5530C $3,995

fi-5120C $1,195
fi-5220C $1,995

fi-5110C $895

fi-5015C $695

fi-60F A6 Flatbed Scanner $395

$1,000 $2,000 $4,000 $5,000 $8,000 $17,000 $25,000

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More information






- Fujitsu Document Scanners
  - Web Site: http://www.fcpa.com
  - E-mail: ecmWebinars@fcpa.fujitsu.com
  - Phone: 888-425-8228

- Hyland Software, Inc. (Developer's of OnBase)
  - Web Site: http://www.onbase.com
  - E-mail: Eric.Walker@OnBase.com
  - Phone: 440-788-5000